REQUEST FOR CHANGE - BASELINE ITEMS
NWS 506

1.   DATE 9/7/99   REQUEST FOR CHANGE NUMBER   WRH262

2.   TITLE Un-mirror Disk Space and install Advanced Intelligent Tape (AIT) system on the Northwest River Forecast Center (NWRFC) AWIPS.

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5.   REQUIREMENT STATEMENT   (Attach supplement if necessary.)

     a.   **Requirements Description**

          Un-mirror three 9 Gb drives

          The disk space requirements of the NWRFC were partially met with the recent procurement of the three 9 GB disk drives for the RFC AWIPS system. However, the current RFC AWIPS disk allocations are insufficient for the needs of NWRFC and there remains a need for additional disk space to store data. The NWRFC currently manages, outside of AWIPS, 108GB of total disk space which currently utilizes approximately 75GB, or 70% of the available storage. Disk space needed to meet NWRFC requirements can be satisfied by AWIPS by removing disk mirroring on the three 9GB drives and relegating the disk space for other RFC use.

          Install External Advanced Intelligent Tape System on AWIPS

          The proposed un-mirrored space will need an alternative means for backup and recovery. Additionally, the NWRFC has a requirement to continue maintaining an off-site system backup in case of catastrophic failure. In order to meet these two basic requirements, the NWRFC is seeking permission to attach an Advanced Intelligent Tape (AIT) system to an AWIPS data server (DS1) or workstation. The AIT will provide the necessary functionally to support both on- and off-site backup for the RFC. The AIT will be used to provide backup capability only to those disk systems not already mirrored or supported through the OMNIback system.

b.   **Benefits:** These modifications will provide additional disk space to the RFC that will be used to house files and applications essential for development and operation functions at the RFC. The proposed approach will allow for future growth of disk space at the RFC while meeting the backup requirements utilizing the AIT. Additionally, our experience over the years has shown overwhelmingly that an off-system, rotating tape backup meets our functional requirements for backup, permits selective backup of file systems, guards against immediate backup of corrupted files, renders a viable method for quick recovery of accidental deletion of files, and furnishes a viable means for recovering from catastrophe.

c.   **Impact:** No negative impact is expected or anticipated.

d.   **Resources:** The AIT system will be managed and maintained solely by the RFC Computer Systems Analyst and WSFO ESA. No workload will be incurred by the NCF.

e.   **Priority:** High. There is a need for approval prior to full migration of RFC operations to AWIPS.

6.   STATIONS AFFECTED:
     a. All Station _ b. All WSFOs _ c. All WSOs _
     d. All RFCs _ e. Specific Stations: **NWRFC**

7.   BASELINE ITEMS AFFECTED: Either the AWIPS DS-1 or a single NWRFC AWIPS Workstation.

8.   IMPLEMENTATION INSTRUCTIONS   _(Attached) X (Not Affected)

9.   TESTING PROCEDURES   _   X

10. OPERATIONS INSTRUCTIONS   _   X

11. MAINTENANCE INSTRUCTIONS   _   X

12. DOCUMENTATION   _   X

13. PARTS DESCRIPTION   _   X